

GOVERNMENT POLYTECHNIC NASHIK

### Department of Electrical **Newsletter**

Editor- Mr. M. P. Bodke Co-Editor-Mr. Krishna Vadnere.

School Connect Page 4

Students Activities page 6 Industrial Visits Page 9



### ELECTRICAL ENGINEERING DEPARTMENT

#### **OUR VISION**

To be the center of excellence in the development of manpower, entrepreneurship and technology meeting the diverse needs of the customer. The department shall be the technology centre for electrical engineering works thereby meeting the skill and testing requirements in the electrical engineering technology in business and industry.

#### **OUR MISSION**

Department of Electrical Engineering is committed M1. To provide diploma level technical education so as to equip learners with skills related to entrepreneurship, lifelong learning and employability.

M2. To disseminate knowledge with practical exposure ensuring, ethical, professional and safety Practices to meet the needs of industry and society.

M3. To be updated through self evaluation and continuous improvement.

M4. To be acquainted with the modern trends and technology in electrical engineering field through testing and consultancy work and continuing education.



# From HOD's Desk

Thanks all, Best wishers of our department by giving suggestions for last issue. It gives me immense pleasure to publish Winter 2019 newsletter.

In ODD term of academic year 2018-19 our department receives 'Best Laboratory Award' by MSBTE Mumbai for Electrical Machines lab. Various Expert lectures by eminent personality from various field was organized and students are visited to industries to bridge the gap to achieve PO's.

Results of Winter -2019 are enlightening and proves that our Co's are fulfilled. I congratulate to all students and Staff for good results.

This is possible due to hard work and efforts taken by our staff and constant Guidance, encouragement of our beloved principal Shri Nathe Sir.

I am also glad to inform that our departmental staff visited to various schools in Nashik and successfully explained importance and opportunities of diploma education to SSC appearing students.



Prof. R.U. Shelke HOD EE Department.



# **Highlights**

#### 1. Best laboratory award

Electrical Machines laboratory of our Department Received Best Laboratory award for the academic year 2018-19 by MSBTE Mumbai.

Electrical Machines Lab of our Department is well Equipped with Workbench of Three phase induction, D.C. Compound, Hysteresis motor, Shaded pole induction, Reluctance motor, Stroboscope, single and three phase transformer. This lab is well organised and mats are used for safety of students.

MSBTE Committee visited laboratory and Examined it on various parameters and awarded with best Laboratory award. The Lab In charges are Prof L S Patil and Prof S S Ashtputre



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M.S. Board of Technical Mumbai.

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#### 2. School Connect Programme

Department carried MSBTE sponsored School Connect Programmes.

The Department of Electrical Took School Connect programme giving information to Students of 10th Standard about Diploma education, Future career Scope, Various branches, Scholarships and Admission process. Department Organised programmes at eight various Schools like St. Patrick, Barnes, R. A. Anand-rushi English medium School.







#### 3. 150th Birth Anniversary of Gandhi

Government Polytechnic Nashik Celebrated the 150th Birth Anniversary of Mahatma Gandhi with great Enthusiasm.

- This year is the 150<sup>th</sup> birth anniversary of father of nation Mahatma Gandhi. On This occasion Government polytechnic Nashik decided to celebrate this year with various activities to impart the thoughts of Mahatma Gandhi to the students.
- Department participated in many competitions like speech competition, essay writing, rallies were drawn to aware people.







# **Students** Activities

Achievements of students from Our Department in terms of academics, sports, project competitions, social gathering.

Students from TYEE Ayushi Barad and Lokesh Chaudhari won second prize for their paper 'Distributed Generation and Smart Grid' in state level paper presentation competition organized by MSBTE at Sandip Polytechnic, Nashik.



Students from TYEE Pranav Sadafal won First prize for Speech competition organised at the GP Nashik on the occasion of 150<sup>th</sup> Birth Anniversary of Mahatma Gandhi.



Students from third year electrical Krishna Vadnere won second prize for Speech competition organised at the GP Nashik on the occasion of 150<sup>th</sup> Birth Anniversary of Mahatma Gandhi.





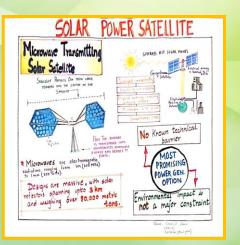


Students from Second year electrical Priyanka Borse won third prize for Essay writing competition organised at the GP Nashik on the occasion of 150<sup>th</sup> Birth Anniversary of Mahatma Gandhi.

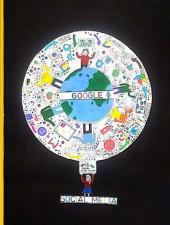
Students from TYEE Gauri Jadhav and Divya Vyas won Third prize for their paper 'Space based solar power satellite' in state level paper presentation competition organized by MSBTE at sandip Polytechnic, Nashik.



Siddhi Ubale won first prize for poster competition held on the occasion of Engineer's day while Priyanka Gosavi and Dhanashri Shirsath won second prize and Priyanka Borse and Shital Lodhe won third prize.









# Industrial Visits

Industrial visits are considered as one of the tactical methods of teaching. The main reason behind this, it lets student to know things practically through interaction, working methods and practices.

Industrial visit of Third Year Electrical students was organized to 33/11 kV substation of Mahavitaran at Nashik road. In this visit students got practical exposure to working of isolators and circuit breakers. Also students learn the layouts of substation and working of transformer.



Students from SYEE visited Indian Railway Traction machine workshop at Nashik road. This workshop gave students practical exposure to DC machine and induction motor internal parts.



Department of Electrical has organized an industrial visit to Shivananda Electronics for 2nd year students. 61 students along with 3 faculties were visited the plant. The visit was very fruitful as students learn various security systems and their working.













# **Expert** Lectures

Expert Lecturer with proven expertise in a topic adds credibility to our content. Hearing new voices provides students not only with different points-of-view, but also with potential resources they can apply in later courses.

Department of Electrical Engineering has organized an expert lecture on 'Recent Trends in CT PT' by Mr. P. P. Phirke Director of Skipper Industry Ltd, Sinnar. Students got knowledge about New Technology in instrument transformers.



> MSBTE sponsored Expert lecture on 'Advantages of SAP in industry' by Mr. Akshay Kasliwal was organised by EED so that students gets aware about SAP software training required at the industry level.



Expert lecture by Mr. C. A. Phalke (Deputy Executive Engineer MSEDCL Nashik) on Stress Management was organised for Our Students. This lecture helped students to relieve their Stress while doing their diploma course.





### **Miscellaneous**

This includes other activities done by students as social and welfare of society. Parent meets celebration of special days blood donation camp etc.

On the Occasion of Viaja Dashmi Shashra pooja at department level was organized. Students were guided about importance, maintenance of instruments and Equipments in the world for making human life comfortable.





The staff of EED of G P Awsari & G P Aurangabad visited Our Department for the Guidance regarding NBA Accreditation. Complete guidance in all respect was shared with the faculties and their entire questions were solved.





#### Celebration of Engineer's Day

Engineer's Day was Celebrated at department with great Enthusiasm. Many Competitions were Organized like Poster presentation, Slogan Writing etc. Big Swatchhyata Drive was conducted at the department and plantation was also done. Students also thanked their teachers for their guidance.

Sheyash Avhad won first prize for slogan competition While Gaurav Jadhav and Lokesh Chaudhari won second prize.





Winter 19



Celebration of Teacher's Day





### Darpan(Wall Magzine)





### Science News

### Solar power from 'the dark side' unlocked by a new formula

Most of today's solar panels capture sunlight and convert it to electricity only from the side facing the sky. If the dark underside of a solar panel could also convert sunlight reflected off the ground, even more electricity might be generated.

Double-sided solar cells are already enabling panels to sit vertically on land or rooftops and even horizontally as the canopy of a gas station, but it hasn't been known exactly how much electricity these panels could ultimately generate or the money they could save.

A new thermodynamic formula reveals that the bifacial cells making up doublesided panels generate on average 15% to 20% more sunlight to electricity than the monofacial cells of today's one-sided solar panels, taking into consideration different terrain such as grass, sand, concrete and dirt.

The formula, developed by two Purdue University physicists, can be used for calculating in minutes the most electricity that bifacial solar cells could generate in a variety of environments, as defined by a thermodynamic limit.

"The formula involves just a simple triangle, but distilling the extremely complicated physics problem to this elegantly simple formulation required years of modeling and research. This triangle will help companies make better decisions on investments in next-generation solar cells and figure out how to design them to be more efficient," said Muhammad "Ashraf" Alam, Purdue's Jai N. Gupta Professor of Electrical and Computer Engineering.